

Highly Erodible Soil Map Unit List - Eastern Polk County, MN

C = .25

R = 80

This data is only to be used for HEL determinations.

This is the "frozen data" based on 01/01/1990 information. Values other than "HELC" should only be used for PHEL.

| <b>Mapunit</b> | <b>Mapunit Name</b>   | <b>HELC</b> | <b>T</b> | <b>K</b> | <b>I</b> | <b>LS</b> |
|----------------|---|-------------|----------|----------|----------|-----------|
| I721A          | Arveson loam, 0 to 2 percent slopes   | NHEL        | 5        | 0.17     | 134      | 0.13      |
| 341B           | Arvilla sandy loam, 1 to 4 percent slopes                                     | NHEL        | 3        | 0.2      | 86       | 0.23      |
| I668B          | Arvilla sandy loam, 2 to 6 percent slopes                                     | NHEL        | 3        | 0.2      | 86       | 0.23      |
| 767            | Auganaush loam  | NHEL        | 3        | 0.3      | 48       | 0.15      |
| I633A          | Augsburg and Wheatville loams, 0 to 2 percent slopes                          | NHEL        | 4        | 0.3      | 86       | 0.15      |
| 1297           | Augsburg very fine sandy loam   | NHEL        | 4        | 0.3      | 86       | 0.15      |
| I2A            | Augsburg very fine sandy loam, clayey till substratum, 0 to 2 percent slopes  | NHEL        | 4        | 0.3      | 86       | 0.15      |
| I110A          | Augsburg, Borup, and Colvin soils, very poorly drained, 0 to 1 percent slopes | NHEL        | 4        | 0.3      | 86       | 0.15      |
| I467A          | Bearden silt loam, 0 to 1 percent slopes                                      | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 67A            | Bearden silt loam, 0 to 2 percent slopes                                      | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 67B            | Bearden silt loam, 2 to 6 percent slopes                                      | NHEL        | 5        | 0.3      | 86       | 0.32      |
| I119A          | Bearden silty clay loam, 0 to 1 percent slopes                                | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 93A            | Bearden silty clay loam, 0 to 2 percent slopes                                | NHEL        | 5        | 0.4      | 86       | 0.15      |
| 1963           | Bearden-Colvin complex  | NHEL        | 5        | 0.3      | 86       | 0.15      |
| I123A          | Bearden-Colvin silty clay loams, 0 to 2 percent slopes                        | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 908            | Bearden-Fargo complex   | NHEL        | 5        | 0.3      | 86       | 0.15      |
| I627A          | Bearden-Fargo complex, 0 to 2 percent slopes                                  | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 733            | Berner muck   | NHEL        | 5        | 0.0      | 134      | 0.11      |
| I3A            | Berner muck, 0 to 1 percent slopes  | NHEL        | 5        | 0.0      | 134      | 0.11      |
| I4A            | Berner, Rosewood, and Strathcona soils, seepy, 0 to 2 percent slopes          | NHEL        | 5        | 0.0      | 134      | 0.11      |
| 348            | Borup loam, depressional  | NHEL        | 4        | 0.3      | 86       | 0.11      |
| 1299           | Borup very fine sandy loam  | NHEL        | 4        | 0.3      | 86       | 0.15      |
| I6A            | Borup very fine sandy loam, 0 to 2 percent slopes                             | NHEL        | 4        | 0.3      | 86       | 0.11      |
| I7A            | Bowstring-Fluvaquents complex, 0 to 2 percent slopes, frequently flooded      | NHEL        | 5        | 0.0      | 134      | 0.15      |
| 1325           | Bowstring-Fluvaquents complex, frequently flooded                             | NHEL        | 5        | 0.0      | 134      | 0.15      |
| 681            | Brandsvold loam   | NHEL        | 5        | 0.2      | 56       | 0.15      |
| 422A           | Bygland silty clay loam, 0 to 2 percent slopes                                | NHEL        | 5        | 0.3      | 38       | 0.15      |
| I748A          | Bygland silty clay loam, 0 to 2 percent slopes                                | NHEL        | 5        | 0.3      | 38       | 0.15      |
| 422B           | Bygland silty clay loam, 2 to 6 percent slopes                                | NHEL        | 5        | 0.3      | 38       | 0.32      |
| I748B          | Bygland silty clay loam, 2 to 6 percent slopes                                | NHEL        | 5        | 0.3      | 38       | 0.32      |
| 422C2          | Bygland silty clay loam, 6 to 12 percent slopes, eroded                       | NHEL        | 5        | 0.3      | 38       | 0.99      |
| I748C          | Bygland silty clay loam, 6 to 12 percent slopes, eroded                       | NHEL        | 5        | 0.3      | 38       | 0.99      |
| 544            | Cathro muck   | NHEL        | 5        | 0.0      | 134      | 0.11      |
| I8A            | Cathro muck, 0 to 1 percent slopes  | NHEL        | 5        | 0.0      | 134      | 0.11      |
| 20D2           | Chapett fine sandy loam, 12 to 20 percent slopes, eroded                      | NHEL        | 5        | 0.2      | 86       | 2.20      |
| 20B            | Chapett fine sandy loam, 2 to 6 percent slopes                                | NHEL        | 5        | 0.2      | 86       | 0.32      |

|       |   |      |   |     |     |      |
|-------|---|------|---|-----|-----|------|
| 20E   | Chapett fine sandy loam, 20 to 40 percent slopes                          | HEL  | 5 | 0.2 | 86  | 6.00 |
| 20C2  | Chapett fine sandy loam, 6 to 12 percent slopes, eroded                   | NHEL | 5 | 0.2 | 86  | 0.99 |
| 641   | Clearwater clay   | NHEL | 5 | 0.3 | 86  | 0.15 |
| I9A   | Clearwater clay, 0 to 2 percent slopes                                    | NHEL | 5 | 0.3 | 86  | 0.15 |
| 642   | Clearwater loam   | NHEL | 5 | 0.3 | 56  | 0.15 |
| 749   | Colvin silt loam, occasionally flooded                                    | NHEL | 5 | 0.3 | 86  | 0.15 |
| 47    | Colvin silty clay loam  | NHEL | 5 | 0.3 | 86  | 0.15 |
| I376A | Colvin silty clay loam, 0 to 1 percent slopes                             | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1964  | Colvin-Fargo complex  | NHEL | 5 | 0.3 | 86  | 0.15 |
| I124A | Colvin-Fargo complex, 0 to 2 percent slopes                               | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1866  | Colvin-Perella complex  | NHEL | 5 | 0.3 | 86  | 0.15 |
| I666A | Colvin-Perella silty clay loams, 0 to 2 percent slopes                    | NHEL | 5 | 0.3 | 86  | 0.15 |
| 494B  | Darnen loam, 2 to 6 percent slopes  | NHEL | 5 | 0.3 | 48  | 0.32 |
| 547   | Deerwood muck   | HEL  | 3 | 0.0 | 134 | 0.11 |
| I11A  | Deerwood muck, 0 to 1 percent slopes                                      | HEL  | 3 | 0.0 | 134 | 0.11 |
| 565   | Eckvoll loamy fine sand   | NHEL | 5 | 0.2 | 134 | 0.15 |
| I12A  | Eckvoll loamy fine sand, 0 to 3 percent slopes                            | NHEL | 5 | 0.2 | 134 | 0.15 |
| 1233D | Esmond-Heimdal complex, 12 to 20 percent slopes, eroded                   | HEL  | 5 | 0.3 | 86  | 2.20 |
| 645   | Espelie fine sandy loam   | NHEL | 4 | 0.2 | 86  | 0.15 |
| I13A  | Espelie fine sandy loam, till substratum, 0 to 2 percent slopes           | NHEL | 4 | 0.2 | 86  | 0.15 |
| 667B  | Fairdale silt loam, 1 to 6 percent slopes, occasionally flooded           | NHEL | 5 | 0.2 | 86  | 0.23 |
| I14B  | Fairdale silt loam, 1 to 6 percent slopes, occasionally flooded           | NHEL | 5 | 0.2 | 86  | 0.23 |
| 667C2 | Fairdale silt loam, 6 to 15 percent slopes, eroded, occasionally flooded  | NHEL | 5 | 0.2 | 86  | 0.99 |
| I14D  | Fairdale silt loam, 6 to 15 percent slopes, occasionally flooded          | NHEL | 5 | 0.2 | 86  | 0.23 |
| I233A | Fargo silty clay loam, 0 to 1 percent slopes                              | NHEL | 5 | 0.3 | 86  | 0.15 |
| 57A   | Fargo silty clay, 0 to 1 percent slopes                                   | NHEL | 5 | 0.3 | 86  | 0.15 |
| I229A | Fargo silty clay, 0 to 1 percent slopes                                   | NHEL | 5 | 0.3 | 86  | 0.15 |
| I235A | Fargo silty clay, depressional, 0 to 1 percent slopes                     | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1871  | Fargo silty clay, swales  | NHEL | 5 | 0.3 | 86  | 0.11 |
| 66    | Flaming loamy fine sand   | NHEL | 5 | 0.2 | 134 | 0.23 |
| I16F  | Fluvaquents,frequently flooded-Hapludolls complex, 0 to 30 percent slopes | NHEL | 5 | 0.2 | 56  | 0.15 |
| 1006  | Fluvaquents-Haplaborolls complex, 0 to 30 percent slopes                  | NHEL | 5 | 0.2 | 56  | 0.15 |
| I17A  | Foldahl fine sandy loam, loamy till substratum, 0 to 3 percent slopes     | NHEL | 5 | 0.2 | 134 | 0.15 |
| 426   | Foldahl loamy fine sand   | NHEL | 5 | 0.2 | 134 | 0.15 |
| I18A  | Foldahl loamy fine sand, loamy till substratum, 0 to 3 percent slopes     | NHEL | 5 | 0.2 | 134 | 0.15 |
| 65    | Foxhome sandy loam  | NHEL | 3 | 0.2 | 86  | 0.15 |
| I19A  | Foxhome sandy loam, 0 to 3 percent slopes                                 | NHEL | 3 | 0.2 | 86  | 0.15 |
| I20A  | Foxlake loam, 0 to 2 percent slopes                                       | NHEL | 5 | 0.3 | 86  | 0.15 |
| 296   | Fram loam   | NHEL | 5 | 0.3 | 86  | 0.23 |
| I21A  | Fram loam, 1 to 3 percent slopes  | NHEL | 5 | 0.3 | 86  | 0.23 |
| I507B | Glyndon loam, dry, 2 to 6 percent slopes                                  | NHEL | 5 | 0.3 | 86  | 0.32 |
| I711A | Glyndon loam, thin surface, 0 to 2 percent slopes                         | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1304A | Glyndon very fine sandy loam, 0 to 2 percent slopes                       | NHEL | 5 | 0.3 | 86  | 0.15 |

|       |   |      |   |      |     |      |
|-------|---|------|---|------|-----|------|
| I23A  | Glyndon very fine sandy loam, 0 to 2 percent slopes                 | NHEL | 5 | 0.3  | 86  | 0.15 |
| 1304B | Glyndon very fine sandy loam, 2 to 6 percent slopes                 | NHEL | 5 | 0.3  | 86  | 0.32 |
| 59    | Grimstad fine sandy loam  | NHEL | 5 | 0.2  | 86  | 0.15 |
| I24A  | Grimstad fine sandy loam, 0 to 3 percent slopes                     | NHEL | 5 | 0.2  | 86  | 0.15 |
| 1280  | Gunclub silty clay loam   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I730A | Gunclub silty clay loam, 0 to 2 percent slopes                      | NHEL | 5 | 0.3  | 86  | 0.15 |
| 735B  | Halverson loamy fine sand, 1 to 6 percent slopes                    | NHEL | 5 | 0.2  | 134 | 0.32 |
| I758B | Halverson loamy fine sand, 1 to 6 percent slopes                    | NHEL | 5 | 0.2  | 134 | 0.32 |
| 735C  | Halverson loamy fine sand, 6 to 15 percent slopes                   | NHEL | 5 | 0.2  | 134 | 1.20 |
| I758D | Halverson loamy fine sand, 6 to 15 percent slopes                   | NHEL | 5 | 0.2  | 134 | 1.20 |
| 372   | Hamar loamy fine sand   | NHEL | 5 | 0.2  | 134 | 0.15 |
| I25A  | Hamar loamy fine sand, 0 to 2 percent slopes                        | NHEL | 5 | 0.2  | 134 | 0.15 |
| I26A  | Hamerly loam, 0 to 2 percent slopes                                 | NHEL | 5 | 0.3  | 86  | 0.15 |
| 184A  | Hamerly loam, 0 to 3 percent slopes                                 | NHEL | 5 | 0.3  | 86  | 0.15 |
| 1878  | Hamre muck  | NHEL | 5 | 0.0  | 134 | 0.11 |
| I27A  | Hamre muck, 0 to 1 percent slopes                                   | NHEL | 5 | 0.0  | 134 | 0.11 |
| 111   | Hangaard sandy loam   | HEL  | 2 | 0.2  | 86  | 0.15 |
| I28A  | Hangaard sandy loam, 0 to 2 percent slopes                          | HEL  | 2 | 0.2  | 86  | 0.15 |
| 746   | Haslie muck   | NHEL | 5 | 0.0  | 134 | 0.11 |
| 1113  | Haslie, Seelyeville, and Cathro soils, ponded                       | NHEL | 5 | 0.0  | 134 | 0.11 |
| I29D  | Hattie clay, 6 to 18 percent slopes                                 | PHEL | 5 | 0.3  | 86  | 1.80 |
| 185D2 | Hattie clay, 6 to 18 percent slopes, eroded                         | PHEL | 5 | 0.3  | 86  | 1.80 |
| I15A  | Hecla loamy fine sand, 0 to 3 percent slopes                        | NHEL | 5 | 0.17 | 134 | 0.13 |
| I364A | Hecla-Garborg-Arveson complex, 0 to 2 percent slopes                | NHEL | 5 | 0.17 | 134 | 0.13 |
| 1117  | Hedman loam   | NHEL | 5 | 0.2  | 86  | 0.15 |
| I30A  | Hedman loam, 0 to 2 percent slopes                                  | NHEL | 5 | 0.2  | 86  | 0.15 |
| 1121  | Hedman loam, depressional   | NHEL | 5 | 0.2  | 86  | 0.11 |
| I807A | Hedman loam, very poorly drained, 0 to 1 percent slopes             | NHEL | 5 | 0.2  | 86  | 0.15 |
| 1142  | Hedman-Fram complex   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I31A  | Hedman-Fram complex, 0 to 3 percent slopes                          | NHEL | 5 | 0.3  | 86  | 0.23 |
| 935   | Hegne-Fargo complex   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I130A | Hegne-Fargo silty clays, 0 to 2 percent slopes                      | NHEL | 5 | 0.3  | 86  | 0.15 |
| 827B  | Heimdal-Esmond complex, 2 to 6 percent slopes                       | NHEL | 5 | 0.3  | 86  | 0.32 |
| 827C2 | Heimdal-Esmond complex, 6 to 12 percent slopes, eroded              | NHEL | 5 | 0.3  | 86  | 0.99 |
| 647   | Hilaire loamy fine sand   | HEL  | 4 | 0.2  | 134 | 0.15 |
| I33A  | Hilaire loamy fine sand, 0 to 3 percent slopes                      | HEL  | 4 | 0.2  | 134 | 0.15 |
| 643   | Huot fine sandy loam  | NHEL | 4 | 0.2  | 86  | 0.15 |
| I34A  | Huot fine sandy loam, clayey till substratum, 0 to 3 percent slopes | NHEL | 4 | 0.2  | 86  | 0.15 |
| I35A  | Karlsruhe sandy loam, 0 to 3 percent slopes                         | NHEL | 3 | 0.2  | 86  | 0.15 |
| I690A | Kittson loam, wet, 0 to 3 percent slopes                            | NHEL | 5 | 0.2  | 86  | 0.13 |
| 670   | Knute fine sandy loam   | NHEL | 5 | 0.2  | 86  | 0.15 |
| I37A  | Kratka and Strathcona soils, 0 to 1 percent slopes                  | NHEL | 5 | 0.2  | 86  | 0.15 |
| 481   | Kratka fine sandy loam  | NHEL | 5 | 0.2  | 86  | 0.15 |

|       |  |      |   |      |     |      |
|-------|--|------|---|------|-----|------|
| I38A  | Kratka fine sandy loam, 0 to 2 percent slopes                        | NHEL | 5 | 0.2  | 86  | 0.15 |
| I594A | LaDelle silt loam, 0 to 2 percent slopes, occasionally flooded       | NHEL | 5 | 0.3  | 48  | 0.15 |
| 1323B | LaDelle silt loam, 0 to 3 percent slopes, occasionally flooded       | NHEL | 5 | 0.3  | 48  | 0.15 |
| I394A | Lamoure silt loam, 0 to 1 percent slopes, occasionally flooded       | NHEL | 5 | 0.3  | 86  | 0.14 |
| 979D2 | Langhei-Waukon complex, 12 to 20 percent slopes, eroded              | HEL  | 5 | 0.3  | 86  | 2.20 |
| 1916  | Lindaas silty clay loam  | NHEL | 5 | 0.3  | 38  | 0.15 |
| I624A | Lindaas silty clay loam, 0 to 1 percent slopes                       | NHEL | 5 | 0.3  | 38  | 0.15 |
| 713   | Linveldt fine sandy loam   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I39A  | Linveldt fine sandy loam, 0 to 3 percent slopes                      | NHEL | 5 | 0.3  | 86  | 0.15 |
| 707A  | Lizzie silt loam, 1 to 3 percent slopes                              | NHEL | 5 | 0.3  | 56  | 0.23 |
| I812A | Lizzie silt loam, 1 to 3 percent slopes                              | NHEL | 5 | 0.3  | 56  | 0.23 |
| 45B   | Maddock loamy fine sand, 1 to 6 percent slopes                       | NHEL | 5 | 0.2  | 134 | 0.32 |
| I40B  | Maddock loamy fine sand, 1 to 6 percent slopes                       | NHEL | 5 | 0.2  | 134 | 0.32 |
| 45E   | Maddock loamy fine sand, 12 to 30 percent slopes                     | PHEL | 5 | 0.2  | 134 | 2.20 |
| I40F  | Maddock loamy fine sand, 12 to 30 percent slopes                     | PHEL | 5 | 0.2  | 134 | 2.20 |
| 45C   | Maddock loamy fine sand, 6 to 12 percent slopes                      | NHEL | 5 | 0.2  | 134 | 0.99 |
| I40C  | Maddock loamy fine sand, 6 to 12 percent slopes                      | NHEL | 5 | 0.2  | 134 | 0.99 |
| 737   | Mahkonce loam  | NHEL | 3 | 0.3  | 48  | 0.15 |
| 543   | Markey muck  | HEL  | 4 | 0.0  | 134 | 0.11 |
| I41A  | Markey muck, 0 to 1 percent slopes                                   | HEL  | 4 | 0.0  | 134 | 0.11 |
| I42A  | Markey muck, ponded, 0 to 1 percent slopes                           | HEL  | 4 | 0.0  | 134 | 0.11 |
| 242B  | Marquette loamy sand, 1 to 8 percent slopes                          | HEL  | 2 | 0.2  | 134 | 0.47 |
| I78B  | Marquette loamy sand, 1 to 8 percent slopes                          | HEL  | 2 | 0.2  | 134 | 0.47 |
| 242D  | Marquette loamy sand, 8 to 30 percent slopes                         | HEL  | 2 | 0.2  | 134 | 2.20 |
| I78D  | Marquette loamy sand, 8 to 30 percent slopes                         | HEL  | 2 | 0.2  | 134 | 2.20 |
| 412   | Mavie fine sandy loam  | NHEL | 3 | 0.2  | 86  | 0.15 |
| I43A  | Mavie fine sandy loam, 0 to 2 percent slopes                         | NHEL | 3 | 0.2  | 86  | 0.15 |
| IM-W  | Miscellaneous water  | NHEL |   |      |     |      |
| 718E  | Naytahwaush loam, 15 to 30 percent slopes                            | HEL  | 3 | 0.3  | 48  | 3.00 |
| 718B  | Naytahwaush loam, 2 to 8 percent slopes                              | NHEL | 3 | 0.3  | 48  | 0.47 |
| 718C  | Naytahwaush loam, 8 to 15 percent slopes                             | NHEL | 3 | 0.3  | 48  | 1.20 |
| 1119  | Nielsville silty clay loam   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I731A | Nielsville silty clay loam, 0 to 1 percent slopes                    | NHEL | 5 | 0.3  | 86  | 0.15 |
| 1122  | Nielsville-Perella complex   | NHEL | 5 | 0.3  | 86  | 0.15 |
| 563   | Northwood muck   | NHEL | 5 | 0.0  | 134 | 0.11 |
| I45A  | Northwood muck, 0 to 1 percent slopes                                | NHEL | 5 | 0.0  | 134 | 0.11 |
| 1422  | Northwood muck, marl subsoil   | NHEL | 5 | 0.0  | 134 | 0.11 |
| I774A | Northwood muck, marl subsoil, 0 to 1 percent slopes                  | NHEL | 5 | 0.0  | 134 | 0.11 |
| 671   | Onstad loam  | NHEL | 5 | 0.2  | 56  | 0.15 |
| I906F | Orthents-Aquents-Urban Land, highway complex, 0 to 35 percent slopes | NHEL | 5 | 0.24 | 86  | 0.19 |
| 506   | Overly silty clay loam   | NHEL | 5 | 0.3  | 38  | 0.15 |
| I383A | Overly silty clay loam, 0 to 2 percent slopes                        | NHEL | 5 | 0.3  | 38  | 0.15 |
| IGp   | Pits, gravel and sand  | NHEL | 5 | 0.0  | 134 | 0.23 |

|       |   |      |   |     |     |      |
|-------|---|------|---|-----|-----|------|
| 1030  | Pits, gravel-udipsamments complex                                   | NHEL | 5 | 0.0 | 134 | 0.23 |
| 1874  | Radium loamy sand   | NHEL | 5 | 0.2 | 134 | 0.15 |
| I48A  | Radium loamy sand, 0 to 3 percent slopes                            | NHEL | 5 | 0.2 | 134 | 0.15 |
| I75A  | Radium-Sandberg-Garborg complex, 0 to 3 percent slopes              | NHEL | 5 | 0.2 | 134 | 0.15 |
| 450   | Rauville silty clay loam  | NHEL | 5 | 0.3 | 86  | 0.11 |
| I49A  | Rauville silty clay loam, 0 to 2 percent slopes, frequently flooded | NHEL | 5 | 0.3 | 86  | 0.11 |
| 650   | Reiner fine sandy loam  | NHEL | 5 | 0.2 | 86  | 0.15 |
| I651A | Reis, very-fine-Viking silty clays, 0 to 2 percent slopes           | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1283  | Reis-Clearwater complex   | NHEL | 5 | 0.3 | 86  | 0.15 |
| I52A  | Reis-Clearwater complex, 0 to 2 percent slopes                      | NHEL | 5 | 0.3 | 86  | 0.15 |
| I171A | Rockwell fine sandy loam, 0 to 1 percent slopes                     | NHEL | 3 | 0.2 | 86  | 0.14 |
| 582   | Roliss loam   | NHEL | 5 | 0.3 | 48  | 0.15 |
| I53A  | Roliss loam, 0 to 2 percent slopes                                  | NHEL | 5 | 0.3 | 48  | 0.11 |
| 387   | Roliss loam, depressional   | NHEL | 5 | 0.3 | 48  | 0.11 |
| I54A  | Roliss loam, very poorly drained, 0 to 1 percent slopes             | NHEL | 5 | 0.3 | 48  | 0.11 |
| I853A | Roliss silt loam, 0 to 1 percent slopes                             | NHEL | 5 | 0.3 | 48  | 0.11 |
| 712   | Rosewood fine sandy loam  | NHEL | 3 | 0.2 | 86  | 0.15 |
| I55A  | Rosewood fine sandy loam, 0 to 2 percent slopes                     | NHEL | 3 | 0.2 | 86  | 0.15 |
| I788A | Rosewood, Strathcona, and Berner soils, 0 to 2 percent slopes       | NHEL | 5 | 0.0 | 134 | 0.11 |
| 1882  | Rosewood, Strathcona, and Berner soils, seepy                       | NHEL | 3 | 0.2 | 86  | 0.23 |
| 1278  | Rosewood-Venlo complex  | NHEL | 3 | 0.2 | 86  | 0.15 |
| I56A  | Rosewood-Venlo complex, 0 to 1 percent slopes                       | NHEL | 3 | 0.2 | 86  | 0.15 |
| 258B  | Sandberg loamy sand, 1 to 6 percent slopes                          | NHEL | 5 | 0.2 | 134 | 0.32 |
| 258E  | Sandberg loamy sand, 12 to 30 percent slopes                        | NHEL | 5 | 0.2 | 134 | 2.20 |
| I681E | Sandberg loamy sand, 12 to 30 percent slopes                        | NHEL | 5 | 0.2 | 134 | 2.20 |
| 258C  | Sandberg loamy sand, 6 to 12 percent slopes                         | NHEL | 5 | 0.2 | 134 | 0.99 |
| I681C | Sandberg loamy sand, 6 to 12 percent slopes                         | NHEL | 5 | 0.2 | 134 | 0.99 |
| I57B  | Sandberg-Radium complex, 1 to 6 percent slopes                      | NHEL | 5 | 0.2 | 134 | 0.15 |
| 540   | Seelyeville muck  | NHEL | 5 | 0.0 | 134 | 0.11 |
| I58A  | Seelyeville muck, 0 to 1 percent slopes                             | NHEL | 5 | 0.0 | 134 | 0.11 |
| I828A | Seelyeville muck, calcareous, 0 to 1 percent slopes                 | NHEL | 5 | 0.0 | 134 | 0.11 |
| 1879  | Seelyeville muck, calcareous, 0 to 3 percent slopes                 | NHEL | 5 | 0.0 | 134 | 0.15 |
| 573D  | Serden fine sand, 6 to 30 percent slopes                            | HEL  | 5 | 0.2 | 250 | 1.80 |
| I475B | Sinai silty clay, levees, 0 to 6 percent slopes                     | NHEL | 5 | 0.3 | 86  | 0.32 |
| I671B | Sioux gravelly sandy loam, 2 to 6 percent slopes                    | HEL  | 2 | 0.2 | 86  | 0.32 |
| I672A | Sioux sandy loam, 0 to 2 percent slopes                             | HEL  | 2 | 0.2 | 86  | 0.15 |
| 765   | Smiley loam   | NHEL | 5 | 0.2 | 56  | 0.15 |
| I59A  | Smiley loam, 0 to 2 percent slopes                                  | NHEL | 5 | 0.2 | 56  | 0.15 |
| 1144  | Strathcona and Kratka soils, depressional                           | NHEL | 5 | 0.2 | 86  | 0.11 |
| 439   | Strathcona fine sandy loam  | NHEL | 5 | 0.2 | 86  | 0.15 |
| I70A  | Strathcona fine sandy loam, 0 to 2 percent slopes                   | NHEL | 5 | 0.2 | 86  | 0.15 |
| 1152B | Sugarbush loamy sand, 1 to 8 percent slopes                         | HEL  | 4 | 0.2 | 134 | 0.47 |
| 1152E | Sugarbush loamy sand, 15 to 30 percent slopes                       | HEL  | 4 | 0.2 | 134 | 3.00 |

|       |  |      |   |      |     |      |
|-------|--|------|---|------|-----|------|
| 1152C | Sugarbush loamy sand, 8 to 15 percent slopes                                   | HEL  | 4 | 0.2  | 134 | 1.20 |
| 435   | Syrene sandy loam  | NHEL | 3 | 0.2  | 86  | 0.15 |
| I62A  | Syrene sandy loam, 0 to 2 percent slopes                                       | NHEL | 3 | 0.2  | 86  | 0.15 |
| 651   | Thiefriver fine sandy loam   | NHEL | 3 | 0.2  | 86  | 0.15 |
| I63A  | Thiefriver fine sandy loam, clayey till substratum, 0 to 2 percent slopes      | NHEL | 3 | 0.2  | 86  | 0.15 |
| I759A | Towner loamy fine sand, 0 to 3 percent slopes                                  | NHEL | 5 | 0.20 | 86  | 0.13 |
| I64A  | Ulen fine sandy loam, 0 to 3 percent slopes                                    | NHEL | 5 | 0.2  | 134 | 0.15 |
| 1264  | Ulen loamy fine sand   | NHEL | 5 | 0.2  | 134 | 0.15 |
| I65A  | Ulen loamy fine sand, 0 to 3 percent slopes                                    | NHEL | 5 | 0.2  | 134 | 0.15 |
| I903A | Urban Land-Aquolls complex, 0 to 2 percent slopes                              | NHEL | 5 | 0.2  | 134 | 0.32 |
| 236   | Vallers loam   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I66A  | Vallers loam, 0 to 2 percent slopes  | NHEL | 5 | 0.3  | 86  | 0.15 |
| I762A | Vallers loam, lake washed, 0 to 1 percent slopes                               | NHEL | 5 | 0.3  | 86  | 0.15 |
| 1279  | Vallers-Hamerly complex  | NHEL | 5 | 0.3  | 86  | 0.15 |
| I549A | Vallers-Hamerly loams, 0 to 3 percent slopes                                   | NHEL | 5 | 0.3  | 86  | 0.15 |
| IWa   | Water  | NHEL |   |      |     |      |
| W     | Water  | NHEL |   |      |     |      |
| W     | Water  | NHEL |   |      |     |      |
| 1356  | Water, miscellaneous   | NHEL |   |      |     |      |
| 38D2  | Waukon loam, 12 to 20 percent slopes, eroded                                   | PHEL | 5 | 0.2  | 48  | 2.20 |
| 38B   | Waukon loam, 2 to 6 percent slopes   | NHEL | 5 | 0.2  | 48  | 0.32 |
| 38C2  | Waukon loam, 6 to 12 percent slopes, eroded                                    | NHEL | 5 | 0.2  | 48  | 0.99 |
| 967B  | Waukon-Langhei complex, 2 to 6 percent slopes                                  | NHEL | 5 | 0.3  | 86  | 0.32 |
| 967C2 | Waukon-Langhei complex, 6 to 12 percent slopes, eroded                         | NHEL | 5 | 0.3  | 86  | 0.99 |
| 1315A | Wheatville very fine sandy loam, 0 to 2 percent slopes                         | NHEL | 4 | 0.3  | 86  | 0.15 |
| I111A | Wheatville very fine sandy loam, 0 to 2 percent slopes                         | NHEL | 4 | 0.3  | 86  | 0.15 |
| I68A  | Wheatville very fine sandy loam, clayey till substratum, 0 to 3 percent slopes | NHEL | 4 | 0.3  | 86  | 0.15 |
| 791   | Winterfield loamy fine sand, occasionally flooded                              | NHEL | 5 | 0.2  | 134 | 0.11 |
| 704   | Wyrene sandy loam  | NHEL | 4 | 0.2  | 86  | 0.15 |
| 694D2 | Zell silt loam, 6 to 20 percent slopes, eroded                                 | NHEL | 5 | 0.3  | 86  | 1.40 |
| I150B | Zell, fine-silty-LaDelle silt loams, 2 to 6 percent slopes                     | NHEL | 5 | 0.3  | 86  | 0.15 |
| I202E | Zell-Eckman silt loams, 15 to 25 percent slopes                                | NHEL | 5 | 0.3  | 86  | 1.40 |

Highly Erodible Soil Map Unit List - Western Polk County, MN

C = .30

R = 70

This data is only to be used for HEL determinations.

This is the "frozen data" based on 01/01/1990 information. Values other than "HELC" should only be used for PHEL.

| <b>Mapunit</b> | <b>Mapunit Name</b>   | <b>HELC</b> | <b>T</b> | <b>K</b> | <b>I</b> | <b>LS</b> |
|----------------|---|-------------|----------|----------|----------|-----------|
| I721A          | Arveson loam, 0 to 2 percent slopes   | NHEL        | 5        | 0.17     | 134      | 0.13      |
| 341B           | Arvilla sandy loam, 1 to 4 percent slopes                                     | HEL         | 3        | 0.2      | 86       | 0.23      |
| I668B          | Arvilla sandy loam, 2 to 6 percent slopes                                     | NHEL        | 3        | 0.2      | 86       | 0.23      |
| 767            | Auganaush loam  | NHEL        | 3        | 0.3      | 48       | 0.15      |
| I633A          | Augsburg and Wheatville loams, 0 to 2 percent slopes                          | NHEL        | 4        | 0.3      | 86       | 0.15      |
| 1297           | Augsburg very fine sandy loam   | NHEL        | 4        | 0.3      | 86       | 0.15      |
| I2A            | Augsburg very fine sandy loam, clayey till substratum, 0 to 2 percent slopes  | NHEL        | 4        | 0.3      | 86       | 0.15      |
| I110A          | Augsburg, Borup, and Colvin soils, very poorly drained, 0 to 1 percent slopes | NHEL        | 4        | 0.3      | 86       | 0.15      |
| I467A          | Bearden silt loam, 0 to 1 percent slopes                                      | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 67A            | Bearden silt loam, 0 to 2 percent slopes                                      | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 67B            | Bearden silt loam, 2 to 6 percent slopes                                      | NHEL        | 5        | 0.3      | 86       | 0.32      |
| I119A          | Bearden silty clay loam, 0 to 1 percent slopes                                | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 93A            | Bearden silty clay loam, 0 to 2 percent slopes                                | NHEL        | 5        | 0.4      | 86       | 0.15      |
| 1963           | Bearden-Colvin complex  | NHEL        | 5        | 0.3      | 86       | 0.15      |
| I123A          | Bearden-Colvin silty clay loams, 0 to 2 percent slopes                        | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 908            | Bearden-Fargo complex   | NHEL        | 5        | 0.3      | 86       | 0.15      |
| I627A          | Bearden-Fargo complex, 0 to 2 percent slopes                                  | NHEL        | 5        | 0.3      | 86       | 0.15      |
| 733            | Berner muck   | HEL         | 5        | 0.0      | 134      | 0.11      |
| I3A            | Berner muck, 0 to 1 percent slopes  | NHEL        | 5        | 0.0      | 134      | 0.11      |
| I4A            | Berner, Rosewood, and Strathcona soils, seepy, 0 to 2 percent slopes          | NHEL        | 5        | 0.0      | 134      | 0.11      |
| 348            | Borup loam, depressional  | NHEL        | 4        | 0.3      | 86       | 0.11      |
| 1299           | Borup very fine sandy loam  | NHEL        | 4        | 0.3      | 86       | 0.15      |
| I6A            | Borup very fine sandy loam, 0 to 2 percent slopes                             | NHEL        | 4        | 0.3      | 86       | 0.11      |
| I7A            | Bowstring-Fluvaquents complex, 0 to 2 percent slopes, frequently flooded      | NHEL        | 5        | 0.0      | 134      | 0.15      |
| 1325           | Bowstring-Fluvaquents complex, frequently flooded                             | HEL         | 5        | 0.0      | 134      | 0.15      |
| 681            | Brandsvold loam   | NHEL        | 5        | 0.2      | 56       | 0.15      |
| 422A           | Bygland silty clay loam, 0 to 2 percent slopes                                | NHEL        | 5        | 0.3      | 38       | 0.15      |
| I748A          | Bygland silty clay loam, 0 to 2 percent slopes                                | NHEL        | 5        | 0.3      | 38       | 0.15      |
| 422B           | Bygland silty clay loam, 2 to 6 percent slopes                                | NHEL        | 5        | 0.3      | 38       | 0.32      |
| I748B          | Bygland silty clay loam, 2 to 6 percent slopes                                | NHEL        | 5        | 0.3      | 38       | 0.32      |
| 422C2          | Bygland silty clay loam, 6 to 12 percent slopes, eroded                       | NHEL        | 5        | 0.3      | 38       | 0.99      |
| I748C          | Bygland silty clay loam, 6 to 12 percent slopes, eroded                       | NHEL        | 5        | 0.3      | 38       | 0.99      |
| 544            | Cathro muck   | HEL         | 5        | 0.0      | 134      | 0.11      |
| I8A            | Cathro muck, 0 to 1 percent slopes  | NHEL        | 5        | 0.0      | 134      | 0.11      |
| 20B            | Chapett fine sandy loam, 2 to 6 percent slopes                                | NHEL        | 5        | 0.2      | 86       | 0.32      |
| 20D2           | Chapett fine sandy loam, 12 to 20 percent slopes, eroded                      | NHEL        | 5        | 0.2      | 86       | 2.20      |

|       |   |      |   |     |     |      |
|-------|---|------|---|-----|-----|------|
| 20E   | Chapett fine sandy loam, 20 to 40 percent slopes                          | HEL  | 5 | 0.2 | 86  | 6.00 |
| 20C2  | Chapett fine sandy loam, 6 to 12 percent slopes, eroded                   | NHEL | 5 | 0.2 | 86  | 0.99 |
| 641   | Clearwater clay   | NHEL | 5 | 0.3 | 86  | 0.15 |
| I9A   | Clearwater clay, 0 to 2 percent slopes                                    | NHEL | 5 | 0.3 | 86  | 0.15 |
| 642   | Clearwater loam   | NHEL | 5 | 0.3 | 56  | 0.15 |
| 749   | Colvin silt loam, occasionally flooded                                    | NHEL | 5 | 0.3 | 86  | 0.15 |
| 47    | Colvin silty clay loam  | NHEL | 5 | 0.3 | 86  | 0.15 |
| I376A | Colvin silty clay loam, 0 to 1 percent slopes                             | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1964  | Colvin-Fargo complex  | NHEL | 5 | 0.3 | 86  | 0.15 |
| I124A | Colvin-Fargo complex, 0 to 2 percent slopes                               | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1866  | Colvin-Perella complex  | NHEL | 5 | 0.3 | 86  | 0.15 |
| I666A | Colvin-Perella silty clay loams, 0 to 2 percent slopes                    | NHEL | 5 | 0.3 | 86  | 0.15 |
| 494B  | Darnen loam, 2 to 6 percent slopes  | NHEL | 5 | 0.3 | 48  | 0.32 |
| 547   | Deerwood muck   | HEL  | 3 | 0.0 | 134 | 0.11 |
| I11A  | Deerwood muck, 0 to 1 percent slopes                                      | HEL  | 3 | 0.0 | 134 | 0.11 |
| 565   | Eckvoll loamy fine sand   | HEL  | 5 | 0.2 | 134 | 0.15 |
| I12A  | Eckvoll loamy fine sand, 0 to 3 percent slopes                            | NHEL | 5 | 0.2 | 134 | 0.15 |
| 1233D | Esmond-Heimdal complex, 12 to 20 percent slopes, eroded                   | HEL  | 5 | 0.3 | 86  | 2.20 |
| 645   | Espelie fine sandy loam   | NHEL | 4 | 0.2 | 86  | 0.15 |
| I13A  | Espelie fine sandy loam, till substratum, 0 to 2 percent slopes           | NHEL | 4 | 0.2 | 86  | 0.15 |
| 667B  | Fairdale silt loam, 1 to 6 percent slopes, occasionally flooded           | NHEL | 5 | 0.2 | 86  | 0.23 |
| I14B  | Fairdale silt loam, 1 to 6 percent slopes, occasionally flooded           | NHEL | 5 | 0.2 | 86  | 0.23 |
| 667C2 | Fairdale silt loam, 6 to 15 percent slopes, eroded, occasionally flooded  | NHEL | 5 | 0.2 | 86  | 0.99 |
| I14D  | Fairdale silt loam, 6 to 15 percent slopes, occasionally flooded          | NHEL | 5 | 0.2 | 86  | 0.23 |
| I233A | Fargo silty clay loam, 0 to 1 percent slopes                              | NHEL | 5 | 0.3 | 86  | 0.15 |
| 57A   | Fargo silty clay, 0 to 1 percent slopes                                   | NHEL | 5 | 0.3 | 86  | 0.15 |
| I229A | Fargo silty clay, 0 to 1 percent slopes                                   | NHEL | 5 | 0.3 | 86  | 0.15 |
| I235A | Fargo silty clay, depressional, 0 to 1 percent slopes                     | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1871  | Fargo silty clay, swales  | NHEL | 5 | 0.3 | 86  | 0.11 |
| 66    | Flaming loamy fine sand   | HEL  | 5 | 0.2 | 134 | 0.23 |
| I16F  | Fluvaquents,frequently flooded-Hapludolls complex, 0 to 30 percent slopes | NHEL | 5 | 0.2 | 56  | 0.15 |
| 1006  | Fluvaquents-Haplaborolls complex, 0 to 30 percent slopes                  | NHEL | 5 | 0.2 | 56  | 0.15 |
| I17A  | Foldahl fine sandy loam, loamy till substratum, 0 to 3 percent slopes     | NHEL | 5 | 0.2 | 134 | 0.15 |
| 426   | Foldahl loamy fine sand   | HEL  | 5 | 0.2 | 134 | 0.15 |
| I18A  | Foldahl loamy fine sand, loamy till substratum, 0 to 3 percent slopes     | NHEL | 5 | 0.2 | 134 | 0.15 |
| 65    | Foxhome sandy loam  | HEL  | 3 | 0.2 | 86  | 0.15 |
| I19A  | Foxhome sandy loam, 0 to 3 percent slopes                                 | NHEL | 3 | 0.2 | 86  | 0.15 |
| I20A  | Foxlake loam, 0 to 2 percent slopes                                       | NHEL | 5 | 0.3 | 86  | 0.15 |
| 296   | Fram loam   | NHEL | 5 | 0.3 | 86  | 0.23 |
| I21A  | Fram loam, 1 to 3 percent slopes  | NHEL | 5 | 0.3 | 86  | 0.23 |
| I507B | Glyndon loam, dry, 2 to 6 percent slopes                                  | NHEL | 5 | 0.3 | 86  | 0.32 |
| I711A | Glyndon loam, thin surface, 0 to 2 percent slopes                         | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1304A | Glyndon very fine sandy loam, 0 to 2 percent slopes                       | NHEL | 5 | 0.3 | 86  | 0.15 |

|       |   |      |   |      |     |      |
|-------|---|------|---|------|-----|------|
| I23A  | Glyndon very fine sandy loam, 0 to 2 percent slopes                 | NHEL | 5 | 0.3  | 86  | 0.15 |
| 1304B | Glyndon very fine sandy loam, 2 to 6 percent slopes                 | NHEL | 5 | 0.3  | 86  | 0.32 |
| 59    | Grimstad fine sandy loam  | NHEL | 5 | 0.2  | 86  | 0.15 |
| I24A  | Grimstad fine sandy loam, 0 to 3 percent slopes                     | NHEL | 5 | 0.2  | 86  | 0.15 |
| 1280  | Gunclub silty clay loam   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I730A | Gunclub silty clay loam, 0 to 2 percent slopes                      | NHEL | 5 | 0.3  | 86  | 0.15 |
| 735B  | Halverson loamy fine sand, 1 to 6 percent slopes                    | HEL  | 5 | 0.2  | 134 | 0.32 |
| I758B | Halverson loamy fine sand, 1 to 6 percent slopes                    | NHEL | 5 | 0.2  | 134 | 0.32 |
| 735C  | Halverson loamy fine sand, 6 to 15 percent slopes                   | HEL  | 5 | 0.2  | 134 | 1.20 |
| I758D | Halverson loamy fine sand, 6 to 15 percent slopes                   | NHEL | 5 | 0.2  | 134 | 1.20 |
| 372   | Hamar loamy fine sand   | HEL  | 5 | 0.2  | 134 | 0.15 |
| I25A  | Hamar loamy fine sand, 0 to 2 percent slopes                        | NHEL | 5 | 0.2  | 134 | 0.15 |
| I26A  | Hamerly loam, 0 to 2 percent slopes                                 | NHEL | 5 | 0.3  | 86  | 0.15 |
| 184A  | Hamerly loam, 0 to 3 percent slopes                                 | NHEL | 5 | 0.3  | 86  | 0.15 |
| 1878  | Hamre muck  | HEL  | 5 | 0.0  | 134 | 0.11 |
| I27A  | Hamre muck, 0 to 1 percent slopes                                   | NHEL | 5 | 0.0  | 134 | 0.11 |
| 111   | Hangaard sandy loam   | HEL  | 2 | 0.2  | 86  | 0.15 |
| I28A  | Hangaard sandy loam, 0 to 2 percent slopes                          | HEL  | 2 | 0.2  | 86  | 0.15 |
| 746   | Haslie muck   | HEL  | 5 | 0.0  | 134 | 0.11 |
| 1113  | Haslie, Seelyeville, and Cathro soils, ponded                       | NHEL | 5 | 0.0  | 134 | 0.11 |
| I29D  | Hattie clay, 6 to 18 percent slopes                                 | PHEL | 5 | 0.3  | 86  | 1.80 |
| 185D2 | Hattie clay, 6 to 18 percent slopes, eroded                         | NHEL | 5 | 0.3  | 86  | 1.80 |
| I15A  | Hecla loamy fine sand, 0 to 3 percent slopes                        | NHEL | 5 | 0.17 | 134 | 0.13 |
| I364A | Hecla-Garborg-Arveson complex, 0 to 2 percent slopes                | NHEL | 5 | 0.17 | 134 | 0.13 |
| 1117  | Hedman loam   | NHEL | 5 | 0.2  | 86  | 0.15 |
| I30A  | Hedman loam, 0 to 2 percent slopes                                  | NHEL | 5 | 0.2  | 86  | 0.15 |
| 1121  | Hedman loam, depressional   | NHEL | 5 | 0.2  | 86  | 0.11 |
| I807A | Hedman loam, very poorly drained, 0 to 1 percent slopes             | NHEL | 5 | 0.2  | 86  | 0.15 |
| 1142  | Hedman-Fram complex   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I31A  | Hedman-Fram complex, 0 to 3 percent slopes                          | NHEL | 5 | 0.3  | 86  | 0.23 |
| 935   | Hegne-Fargo complex   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I130A | Hegne-Fargo silty clays, 0 to 2 percent slopes                      | NHEL | 5 | 0.3  | 86  | 0.15 |
| 827B  | Heimdal-Esmond complex, 2 to 6 percent slopes                       | NHEL | 5 | 0.3  | 86  | 0.32 |
| 827C2 | Heimdal-Esmond complex, 6 to 12 percent slopes, eroded              | NHEL | 5 | 0.3  | 86  | 0.99 |
| 647   | Hilaire loamy fine sand   | HEL  | 4 | 0.2  | 134 | 0.15 |
| I33A  | Hilaire loamy fine sand, 0 to 3 percent slopes                      | HEL  | 4 | 0.2  | 134 | 0.15 |
| 643   | Huot fine sandy loam  | NHEL | 4 | 0.2  | 86  | 0.15 |
| I34A  | Huot fine sandy loam, clayey till substratum, 0 to 3 percent slopes | NHEL | 4 | 0.2  | 86  | 0.15 |
| I35A  | Karlsruhe sandy loam, 0 to 3 percent slopes                         | NHEL | 3 | 0.2  | 86  | 0.15 |
| I690A | Kittson loam, wet, 0 to 3 percent slopes                            | NHEL | 5 | 0.2  | 86  | 0.13 |
| 670   | Knute fine sandy loam   | NHEL | 5 | 0.2  | 86  | 0.15 |
| I37A  | Kratka and Strathcona soils, 0 to 1 percent slopes                  | NHEL | 5 | 0.2  | 86  | 0.15 |
| 481   | Kratka fine sandy loam  | HEL  | 5 | 0.2  | 86  | 0.15 |

|       |  |      |   |      |     |      |
|-------|--|------|---|------|-----|------|
| I38A  | Kratka fine sandy loam, 0 to 2 percent slopes                        | NHEL | 5 | 0.2  | 86  | 0.15 |
| I594A | LaDelle silt loam, 0 to 2 percent slopes, occasionally flooded       | NHEL | 5 | 0.3  | 48  | 0.15 |
| 1323B | LaDelle silt loam, 0 to 3 percent slopes, occasionally flooded       | NHEL | 5 | 0.3  | 48  | 0.15 |
| I394A | Lamoure silt loam, 0 to 1 percent slopes, occasionally flooded       | NHEL | 5 | 0.3  | 86  | 0.14 |
| 979D2 | Langhei-Waukon complex, 12 to 20 percent slopes, eroded              | HEL  | 5 | 0.3  | 86  | 2.20 |
| 1916  | Lindaas silty clay loam  | NHEL | 5 | 0.3  | 38  | 0.15 |
| I624A | Lindaas silty clay loam, 0 to 1 percent slopes                       | NHEL | 5 | 0.3  | 38  | 0.15 |
| 713   | Linveldt fine sandy loam   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I39A  | Linveldt fine sandy loam, 0 to 3 percent slopes                      | NHEL | 5 | 0.3  | 86  | 0.15 |
| 707A  | Lizzie silt loam, 1 to 3 percent slopes                              | NHEL | 5 | 0.3  | 56  | 0.23 |
| I812A | Lizzie silt loam, 1 to 3 percent slopes                              | NHEL | 5 | 0.3  | 56  | 0.23 |
| 45B   | Maddock loamy fine sand, 1 to 6 percent slopes                       | HEL  | 5 | 0.2  | 134 | 0.32 |
| I40B  | Maddock loamy fine sand, 1 to 6 percent slopes                       | NHEL | 5 | 0.2  | 134 | 0.32 |
| 45E   | Maddock loamy fine sand, 12 to 30 percent slopes                     | HEL  | 5 | 0.2  | 134 | 2.20 |
| I40F  | Maddock loamy fine sand, 12 to 30 percent slopes                     | PHEL | 5 | 0.2  | 134 | 2.20 |
| 45C   | Maddock loamy fine sand, 6 to 12 percent slopes                      | HEL  | 5 | 0.2  | 134 | 0.99 |
| I40C  | Maddock loamy fine sand, 6 to 12 percent slopes                      | NHEL | 5 | 0.2  | 134 | 0.99 |
| 737   | Mahkonce loam  | NHEL | 3 | 0.3  | 48  | 0.15 |
| 543   | Markey muck  | HEL  | 4 | 0.0  | 134 | 0.11 |
| I41A  | Markey muck, 0 to 1 percent slopes                                   | HEL  | 4 | 0.0  | 134 | 0.11 |
| I42A  | Markey muck, ponded, 0 to 1 percent slopes                           | HEL  | 4 | 0.0  | 134 | 0.11 |
| 242B  | Marquette loamy sand, 1 to 8 percent slopes                          | HEL  | 2 | 0.2  | 134 | 0.47 |
| I78B  | Marquette loamy sand, 1 to 8 percent slopes                          | HEL  | 2 | 0.2  | 134 | 0.47 |
| 242D  | Marquette loamy sand, 8 to 30 percent slopes                         | HEL  | 2 | 0.2  | 134 | 2.20 |
| I78D  | Marquette loamy sand, 8 to 30 percent slopes                         | HEL  | 2 | 0.2  | 134 | 2.20 |
| 412   | Mavie fine sandy loam  | HEL  | 3 | 0.2  | 86  | 0.15 |
| I43A  | Mavie fine sandy loam, 0 to 2 percent slopes                         | NHEL | 3 | 0.2  | 86  | 0.15 |
| IM-W  | Miscellaneous water  | NHEL |   |      |     |      |
| 718E  | Naytahwaush loam, 15 to 30 percent slopes                            | HEL  | 3 | 0.3  | 48  | 3.00 |
| 718B  | Naytahwaush loam, 2 to 8 percent slopes                              | NHEL | 3 | 0.3  | 48  | 0.47 |
| 718C  | Naytahwaush loam, 8 to 15 percent slopes                             | NHEL | 3 | 0.3  | 48  | 1.20 |
| 1119  | Nielsville silty clay loam   | HEL  | 5 | 0.3  | 86  | 0.15 |
| I731A | Nielsville silty clay loam, 0 to 1 percent slopes                    | NHEL | 5 | 0.3  | 86  | 0.15 |
| 1122  | Nielsville-Perella complex   | NHEL | 5 | 0.3  | 86  | 0.15 |
| 563   | Northwood muck   | HEL  | 5 | 0.0  | 134 | 0.11 |
| I45A  | Northwood muck, 0 to 1 percent slopes                                | NHEL | 5 | 0.0  | 134 | 0.11 |
| 1422  | Northwood muck, marl subsoil   | HEL  | 5 | 0.0  | 134 | 0.11 |
| I774A | Northwood muck, marl subsoil, 0 to 1 percent slopes                  | NHEL | 5 | 0.0  | 134 | 0.11 |
| 671   | Onstad loam  | NHEL | 5 | 0.2  | 56  | 0.15 |
| I906F | Orthents-Aquents-Urban Land, highway complex, 0 to 35 percent slopes | NHEL | 5 | 0.24 | 86  | 0.19 |
| 506   | Overly silty clay loam   | NHEL | 5 | 0.3  | 38  | 0.15 |
| I383A | Overly silty clay loam, 0 to 2 percent slopes                        | NHEL | 5 | 0.3  | 38  | 0.15 |
| IGp   | Pits, gravel and sand  | NHEL | 5 | 0.0  | 134 | 0.23 |

|       |   |      |   |     |     |      |
|-------|---|------|---|-----|-----|------|
| 1030  | Pits, gravel-udipsamments complex                                   | HEL  | 5 | 0.0 | 134 | 0.23 |
| 1874  | Radium loamy sand   | HEL  | 5 | 0.2 | 134 | 0.15 |
| I48A  | Radium loamy sand, 0 to 3 percent slopes                            | NHEL | 5 | 0.2 | 134 | 0.15 |
| I75A  | Radium-Sandberg-Garborg complex, 0 to 3 percent slopes              | NHEL | 5 | 0.2 | 134 | 0.15 |
| 450   | Rauville silty clay loam  | NHEL | 5 | 0.3 | 86  | 0.11 |
| I49A  | Rauville silty clay loam, 0 to 2 percent slopes, frequently flooded | NHEL | 5 | 0.3 | 86  | 0.11 |
| 650   | Reiner fine sandy loam  | NHEL | 5 | 0.2 | 86  | 0.15 |
| I651A | Reis, very-fine-Viking silty clays, 0 to 2 percent slopes           | NHEL | 5 | 0.3 | 86  | 0.15 |
| 1283  | Reis-Clearwater complex   | NHEL | 5 | 0.3 | 86  | 0.15 |
| I52A  | Reis-Clearwater complex, 0 to 2 percent slopes                      | NHEL | 5 | 0.3 | 86  | 0.15 |
| I171A | Rockwell fine sandy loam, 0 to 1 percent slopes                     | NHEL | 3 | 0.2 | 86  | 0.14 |
| 582   | Roliss loam   | NHEL | 5 | 0.3 | 48  | 0.15 |
| I53A  | Roliss loam, 0 to 2 percent slopes                                  | NHEL | 5 | 0.3 | 48  | 0.11 |
| 387   | Roliss loam, depressional   | NHEL | 5 | 0.3 | 48  | 0.11 |
| I54A  | Roliss loam, very poorly drained, 0 to 1 percent slopes             | NHEL | 5 | 0.3 | 48  | 0.11 |
| I853A | Roliss silt loam, 0 to 1 percent slopes                             | NHEL | 5 | 0.3 | 48  | 0.11 |
| 712   | Rosewood fine sandy loam  | HEL  | 3 | 0.2 | 86  | 0.15 |
| I55A  | Rosewood fine sandy loam, 0 to 2 percent slopes                     | NHEL | 3 | 0.2 | 86  | 0.15 |
| I788A | Rosewood, Strathcona, and Berner soils, 0 to 2 percent slopes       | NHEL | 5 | 0.0 | 134 | 0.11 |
| 1882  | Rosewood, Strathcona, and Berner soils, seepy                       | HEL  | 3 | 0.2 | 86  | 0.23 |
| 1278  | Rosewood-Venlo complex  | HEL  | 3 | 0.2 | 86  | 0.15 |
| I56A  | Rosewood-Venlo complex, 0 to 1 percent slopes                       | NHEL | 3 | 0.2 | 86  | 0.15 |
| 258B  | Sandberg loamy sand, 1 to 6 percent slopes                          | HEL  | 5 | 0.2 | 134 | 0.32 |
| 258E  | Sandberg loamy sand, 12 to 30 percent slopes                        | HEL  | 5 | 0.2 | 134 | 2.20 |
| I681E | Sandberg loamy sand, 12 to 30 percent slopes                        | NHEL | 5 | 0.2 | 134 | 2.20 |
| 258C  | Sandberg loamy sand, 6 to 12 percent slopes                         | HEL  | 5 | 0.2 | 134 | 0.99 |
| I681C | Sandberg loamy sand, 6 to 12 percent slopes                         | NHEL | 5 | 0.2 | 134 | 0.99 |
| I57B  | Sandberg-Radium complex, 1 to 6 percent slopes                      | NHEL | 5 | 0.2 | 134 | 0.15 |
| 540   | Seelyeville muck  | HEL  | 5 | 0.0 | 134 | 0.11 |
| I58A  | Seelyeville muck, 0 to 1 percent slopes                             | NHEL | 5 | 0.0 | 134 | 0.11 |
| I828A | Seelyeville muck, calcareous, 0 to 1 percent slopes                 | NHEL | 5 | 0.0 | 134 | 0.11 |
| 1879  | Seelyeville muck, calcareous, 0 to 3 percent slopes                 | HEL  | 5 | 0.0 | 134 | 0.15 |
| 573D  | Serden fine sand, 6 to 30 percent slopes                            | HEL  | 5 | 0.2 | 250 | 1.80 |
| I475B | Sinai silty clay, levees, 0 to 6 percent slopes                     | NHEL | 5 | 0.3 | 86  | 0.32 |
| I671B | Sioux gravelly sandy loam, 2 to 6 percent slopes                    | HEL  | 2 | 0.2 | 86  | 0.32 |
| I672A | Sioux sandy loam, 0 to 2 percent slopes                             | HEL  | 2 | 0.2 | 86  | 0.15 |
| 765   | Smiley loam   | NHEL | 5 | 0.2 | 56  | 0.15 |
| I59A  | Smiley loam, 0 to 2 percent slopes                                  | NHEL | 5 | 0.2 | 56  | 0.15 |
| 1144  | Strathcona and Kratka soils, depressional                           | NHEL | 5 | 0.2 | 86  | 0.11 |
| 439   | Strathcona fine sandy loam  | NHEL | 5 | 0.2 | 86  | 0.15 |
| I70A  | Strathcona fine sandy loam, 0 to 2 percent slopes                   | NHEL | 5 | 0.2 | 86  | 0.15 |
| 1152B | Sugarbush loamy sand, 1 to 8 percent slopes                         | HEL  | 4 | 0.2 | 134 | 0.47 |
| 1152E | Sugarbush loamy sand, 15 to 30 percent slopes                       | HEL  | 4 | 0.2 | 134 | 3.00 |

|       |  |      |   |      |     |      |
|-------|--|------|---|------|-----|------|
| 1152C | Sugarbush loamy sand, 8 to 15 percent slopes                                   | HEL  | 4 | 0.2  | 134 | 1.20 |
| 435   | Syrene sandy loam  | HEL  | 3 | 0.2  | 86  | 0.15 |
| I62A  | Syrene sandy loam, 0 to 2 percent slopes                                       | NHEL | 3 | 0.2  | 86  | 0.15 |
| 651   | Thiefriver fine sandy loam   | HEL  | 3 | 0.2  | 86  | 0.15 |
| I63A  | Thiefriver fine sandy loam, clayey till substratum, 0 to 2 percent slopes      | NHEL | 3 | 0.2  | 86  | 0.15 |
| I759A | Towner loamy fine sand, 0 to 3 percent slopes                                  | NHEL | 5 | 0.20 | 86  | 0.13 |
| I64A  | Ulen fine sandy loam, 0 to 3 percent slopes                                    | NHEL | 5 | 0.2  | 134 | 0.15 |
| 1264  | Ulen loamy fine sand   | HEL  | 5 | 0.2  | 134 | 0.15 |
| I65A  | Ulen loamy fine sand, 0 to 3 percent slopes                                    | NHEL | 5 | 0.2  | 134 | 0.15 |
| I903A | Urban Land-Aquolls complex, 0 to 2 percent slopes                              | NHEL | 5 | 0.2  | 134 | 0.32 |
| 236   | Vallers loam   | NHEL | 5 | 0.3  | 86  | 0.15 |
| I66A  | Vallers loam, 0 to 2 percent slopes  | NHEL | 5 | 0.3  | 86  | 0.15 |
| I762A | Vallers loam, lake washed, 0 to 1 percent slopes                               | NHEL | 5 | 0.3  | 86  | 0.15 |
| 1279  | Vallers-Hamerly complex  | NHEL | 5 | 0.3  | 86  | 0.15 |
| I549A | Vallers-Hamerly loams, 0 to 3 percent slopes                                   | NHEL | 5 | 0.3  | 86  | 0.15 |
| IWa   | Water  | NHEL |   |      |     |      |
| W     | Water  | NHEL |   |      |     |      |
| W     | Water  | NHEL |   |      |     |      |
| 1356  | Water, miscellaneous   | NHEL |   |      |     |      |
| 38D2  | Waukon loam, 12 to 20 percent slopes, eroded                                   | NHEL | 5 | 0.2  | 48  | 2.20 |
| 38B   | Waukon loam, 2 to 6 percent slopes   | NHEL | 5 | 0.2  | 48  | 0.32 |
| 38C2  | Waukon loam, 6 to 12 percent slopes, eroded                                    | NHEL | 5 | 0.2  | 48  | 0.99 |
| 967B  | Waukon-Langhei complex, 2 to 6 percent slopes                                  | NHEL | 5 | 0.3  | 86  | 0.32 |
| 967C2 | Waukon-Langhei complex, 6 to 12 percent slopes, eroded                         | NHEL | 5 | 0.3  | 86  | 0.99 |
| 1315A | Wheatville very fine sandy loam, 0 to 2 percent slopes                         | NHEL | 4 | 0.3  | 86  | 0.15 |
| I111A | Wheatville very fine sandy loam, 0 to 2 percent slopes                         | NHEL | 4 | 0.3  | 86  | 0.15 |
| I68A  | Wheatville very fine sandy loam, clayey till substratum, 0 to 3 percent slopes | NHEL | 4 | 0.3  | 86  | 0.15 |
| 791   | Winterfield loamy fine sand, occasionally flooded                              | HEL  | 5 | 0.2  | 134 | 0.11 |
| 704   | Wyrene sandy loam  | NHEL | 4 | 0.2  | 86  | 0.15 |
| 694D2 | Zell silt loam, 6 to 20 percent slopes, eroded                                 | NHEL | 5 | 0.3  | 86  | 1.40 |
| I150B | Zell, fine-silty-LaDelle silt loams, 2 to 6 percent slopes                     | NHEL | 5 | 0.3  | 86  | 0.15 |
| I202E | Zell-Eckman silt loams, 15 to 25 percent slopes                                | NHEL | 5 | 0.3  | 86  | 1.40 |